

# 32  
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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Examiner: EYLER, Yvonne, L.

DEUEL, Thomas, F. et al.

Patent No.: 6,448,381

Group Art Unit: 1646

Issued: September 10, 2002

For: DNA ENCODING HEPARIN  
BINDING GROWTH FACTORS

Attorney Docket: 60019620-0003

Assistant Commissioner for Patents  
Washington, DC 20231

## REQUEST FOR CERTIFICATE OF CORRECTION PURSUANT TO 37 CFR 1.322

Sir:

Transmitted herewith is a proposed Certificate of Correction for the above-captioned Letters Patent.

Patentee submits that the errors set forth in the proposed Certificate of Correction were made by the Patent and Trademark Office and no fee is due. If this is incorrect, please charge any necessary fees to Deposit Account No. 19-3140.

Patentee respectfully requests the issuance of the proposed Certificate of Correction.

Respectfully submitted,



Michael T. Marrah, Reg. No. 40,718  
SONNENSCHN NATH & ROSENTHAL  
P.O. Box #061080  
Wacker Drive Station  
Sears Tower  
Chicago, Illinois 60606-1080

Direct telephone calls to:

(314) 259-5303

Jul-15-03

15:47

From-Sonnenschein Nath &amp; Rosenthal

314 259 5059

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**GROUP 1600****Facsimile Transmittal Sheet**

DATE• July 15, 2003

PLEASE DELIVER THE FOLLOWING PAGES TO:

NAME• Examiner Maurie Baker

FAX• 703.305.7230

CLIENT/MATTER• 60019620.0003

FROM• Kathryn M. Barton, Paralegal

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Kathryn M. Barton

7-15-03

Date

Type of Paper transmitted: Copy of Certificate of Correction that was filed October 21, 2002, including return postcard indicating date of receipt of October 28, 2002

Applicant's Name: Deuel, Thomas, F.

Serial No. 07/542,232

Examiner: Maurie Baker

Filing Date June 21, 1990

Application Title: DNA ENCODING HEPARIN-BINDING GROWTH FACTOR

 PLEASE MATCH OUR REQUEST WITH THE CASE. 

Original will NOT be mailed

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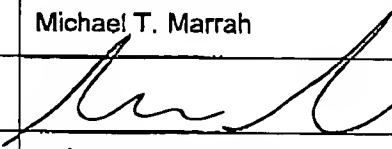
Patent No.	6,448,381
Issued	September 10, 2002
First Named Inventor	DEUEL, Thomas, F.
Group Art Unit	1646
Examiner Name	Eyler, Yvonne, L.
Attorney Docket Number	60019620-0003

## ENCLOSURES (check all that apply)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment / Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><input type="checkbox"/> Drawings<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>Request for Certificate of Correction Pursuant to 37 CFR 1.322<br>Certificate of Correction<br>Return postcard |
|--|---|---|


Remarks

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual Name	Michael T. Marrah
Signature	
Date	10-21-02, 2002

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service "First Class Mail to Address" in an envelope addressed to Assistant Commissioner for Patents, Washington, DC 20231 on Oct. 21, 2002.

Typed or printed name	Kathryn M. Barton	Date	Oct 21, 2002
Signature			

## UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

PATENT NO : 6,448,381

DATED : September 10, 2002

INVENTOR(S) : DEUEL, Thomas, F. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

The title should be replaced with "DNA ENCODING HEPARIN BINDING GROWTH FACTORS."

In Column 1, line 55, delete "." which appears after ";" and before "Zhan."

In Column 5, nucleotide 314 should be changed from "d" to "G."

In Column 5, line 62, the extra space which appears after "ity" should be removed.

In Column 10, line 6, add "." between "7.0" and "About."

In Table II, HBGF8 should be replaced with "95% GLY-LYS-LYS-GLU-LYS-PRO-GLU-LYS-LYS-VAL-LYS-LYS-SER-ASP-CYS-GLY-GLU-TRP-GLN-TRP-SER-VAL-CYS-VAL-PRO."

In Column 10, line 57, add a space after "5299" and before "(1979)."

In Column 12, line 23, replace "Thr" with "Ala"; replace "Pro" with "Gln"; and replace "Leu" with "Gln."

In Column 12, line 41, replace "Asp" with "Glu."

In Column 12, line 43, replace second "Ser" with "Pro."

In Column 12, line 48, add "purified and isolated" before "cDNA" and after "The" and replace "bovine" with "human."

MAILING ADDRESS OF SENDER:

SONNENSCHN NATH & ROSENTHAL  
PO Box #061080, Wacker Drive Station-Sears Tower  
Chicago, Illinois 60606-1080

PATENT NO. 6,448,381

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DATED : September 10, 2002

INVENTOR(S) : DEUEL, Thomas, F. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

The sequence of Claim 2 should read:

GTCAAAGGCA	GGATCAGGTT	CCCCGCCTCC	CAGTCCAAAA	ATCCCGCCAA	50
GAGAGCCCCA	GAGCAGAGGA	AAATCCAAAG	TGGAGAGAGG	GGAAGAAAGA	100
GACCAAGT	GAGTCATCCG	TCCAGAAGG	CGGGGAGAGC	AGCAGCA	150
GCGGCCCAAG					
CAGGAGCTGC	AGCGAGCCGG	GTACCTGGAC	TCAGCGGTAG	CAACCTCGCC	200
CCTTGCAACA	AAGGCAGACT	GAGCGCCAGA	GAGGACGTTT	CCAACTCAAA	250
AATGCAGGCT	CAACAGTACC	AGCAGCAGCG	TCGAAAATTT	GCAGCTGCCT	300
TCTTGGCATT	CATTTTCATA	CTGGCAGCTG	TGGATACTGC	TGAAGCAGGG	350
AAGAAAGAGA	AACCAGAAAA	AAAAGTGAAG	AAGTCTGACT	GTGGAGAATG	400
GCAGTGGAGT	GTGTGTGTGC	CCACCAAGTGG	AGACTGTGGG	CTGGGCACAC	450
GGGAGGGCAC	TCGGACTGGA	GCTGAGTCCA	AGCAAACCAT	GAAGACCCAG	500

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It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

AGATGTAAGA TCCCCTGCAA CTGGAAGAAG CAATTTGGCG CGGAGTGCAA	550
ATACCAGTTC CAGGCCTGGG GAGAATGTGA CCTGAACACA GCCCTGAAGA	600
CCAGAACTGG AAGTCTGAAG CGAGCCCTGC ACAATGCCGA ATGCCAGAAG	650
ACTGTCACCA CTCCCAAGCC CTGTGGCAAA CTGACCAAGC CCAAACCTCA	700
AGCAGAATCT AAGAAGAAGA AAAAGGAAGG CAAGAAACAG GAGAAGATGC	750
TGGATTAAAA GATGTCACCT GTGGAACATA AAAAGGACAT CAGCAAACAG	800
GATCAGTTAA CTATTGCATT TATATGTACC GTAGGCTTTG TATTCAAAAA	850
TTATCTATAG CTAAGTACAC AATAAGCAAA AACAAAAAGA AAAAAAAAAA	900
AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA	950
AAAAAAAAAA A	961

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PATENT NO : 6,448,381

DATED : September 10, 2002

INVENTOR(S) : DEUEL, Thomas, F. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Add Claim 3 as follows:

3. A purified and isolated DNA sequence consisting of a sequence encoding bovine heparin binding growth factor of 168 amino acids having the following amino acid sequence:

Met Gln Thr Pro Gln Tyr Leu Gln Gln Arg Arg Lys Phe Ala Ala	15
Ala Phe Leu Ala Phe Ile Phe Ile Leu Ala Ala Val Asp Thr Ala	30
Glu Ala Gly Lys Lys Glu Lys Pro Glu Lys Lys Val Lys Lys Ser	45
Asp Cys Gly Glu Trp Gln Trp Ser Val Cys Val Pro Thr Ser Gly	60
Asp Cys Gly Leu Gly Thr Arg Glu Gly Thr Arg Thr Gly Ala Glu	75
Cys Lys Gln Thr Met Lys Thr Gln Arg Cys Lys Ile Pro Cys Asn	90
Trp Lys Lys Gln Phe Gly Ala Glu Cys Lys Tyr Gln Phe Gln Ala	105
Trp Gly Glu Cys Asp Leu Asn Thr Ala Leu Lys Thr Arg Thr Gly	120
Ser Leu Lys Arg Ala Leu His Asn Ala Asp Cys Gln Lys Thr Val	135
Thr Ile Ser Lys Pro Cys Gly Lys Leu Thr Lys Ser Lys Pro Gln	150
Ala Glu Ser Lys Lys Lys Lys Lys Glu Gly Lys Lys Gln Glu Lys	165
Met Leu Asp	168

PATENT NO. 6,448,381

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DATED : September 10, 2002

INVENTOR(S) : DEUEL, Thomas, F. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Add Claim 4 as follows:

GAGTGGAGAG	AGTAGAAGAA	AGAGAGCAGG	GAGTCACCGG	GCGTGCGGGG	50
GCGGAGAGCA	GCGGCCGCCG	CGAGCACCAG	CGACTTGGGT	ACCTGGACTC	100
AGGGCAGAAA	AACCTCTCCC	GGATCAACAA	AGGCAGCCTG	AGCGCGCACC	150
GCTCTTTTGC	GACTCCAAAA	TGCAGACTCC	ACAGTACCTG	CAGCAACGTC	200
GAAAATTTGC	AGCTGCCTTT	TTGGCATTIA	TTTTCATCTT	GGCAGCTGTG	250
GACACCGCTG	AAGCAGGAAA	GAAAGAGAAA	CCAGAAAAGA	AGGTGAAGAA	300
GTCTGACTGT	GGAGAATGGC	AGTGGAGTGT	GTGTGTACCA	ACCAGTGGGG	350
ACTGTGGGCT	GGGCACCCGC	GAGGGCACCC	GTACCGGAGC	TGAGTGTAAA	400
CAAACCATGA	AGACCCAGAG	ATGTAAGATC	CCCTGCAACT	GGAAAAAGCA	450
ATTTGGAGCG	GAGTGCAAAT	ACCAGTTCCA	GGCCTGGGGA	GAATGTGATC	500
TGAACACGGC	TCTGAAGACC	CGAACTGGGA	GCCTGAAGCG	AGCCCTCCAC	550
AACGCCGACT	GCCAGAAGAC	AGTCACCATC	TCCAAGCCCT	GTGGCAAGCT	600
GACCAAGTCC	AAACCTCAAG	CAGAATCTAA	GAAGAAGAAA	AAGGAAGGCA	650

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AGAAACAGGA	GAAGATGCTG	GACTAAAAGC	CACCACCTTC	CGTGGACCAT	700
GAAAAGGACA	TCAGCAAACA	CGATCAGTTA	ACTATTGCAT	TTATATCTAC	750
CGTAGGCTTT	TTATTCAAAA	ATTATCTATA	GCTTAAGTAC	ACAATAGGCA	800
GAAACAAAAT	GAAAAGAAAA	ATTTTGTAGT	AGCATTTTTT	TAAATGTAT	850
CAATATACCA	TAGTACCACT	AGGGACTTAT	AATAGAGGAC	TGTAATCCTA	900
TTTAGAATGT	TGACTTATAG	TACATGTAA	GTGATAGAAA	ACTGAGGTAA	950
GTTTTTTGAA	GTTATGTGAT	ATTTTACATT	ACATTTTTTT	TTACATTTTT	1000
TTCTTTTGGC	AGCAATTTAA	ATGTTATGAC	TATGTAAACT	ACTTCTCTTG	1050
TTAGGTAATT	TTTTTCACCT	AGACTTTATT	TCCCAATTGA	GAAAAATATC	1100
TACTAAACAA	AGCAGCAATA	AAATATGATC	ATCCTATCTG	AGGAAAATAT	1150
CTCTTTTCT	GCCAGTGGAT	TTTTAAAAAA	TTGTAGTCAA	CAAAAT	1196

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## MISCELLANEOUS

File 60019610 000 3 Attorney M. Marrah  
 Client Name Barnes-Jewish Hospital  
 Inventor(s) Deuel, Thomas F. et al.  
 Serial No. Patent/Reg. No. 6448391

The following has been received by the U.S. Patent & Trademark Office on the date stamped hereon:

- ☐ Amendment  
☐ Preliminary Amendment  
☐ Response to Missing Part  
☐ Assignment & Cover Sheet  
☐ Brief  
☐ Letter to Commissioner  
☐ CPA Request Transmittal  
☐ Maintenance Fee  
☐ Section Declaration  
☒ Other Request for Certificate of Correction pursuant to 37 CFR 1.312
- ☒ Transmittal Form  
☐ Combined Declaration/Power of Atty.  
☐ Notice of Appeal  
☐ Status Inquiry  
☐ IDS, PTO 1449, References  
☐ Sheet(s) of Drawings  
☐ Letter to Official Draftsman  
☐ Issue Fee/PTO 85b/Certificate of Mailing  
☐ Statement of Use  
☐ Extension of Time To Oppose  
☐ Deposit Acct. No. 18-3140 1.312

☒ Certificate of Correction

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## MISCELLANEOUS

File 60019610 0003 Attorney M. Marrah  
 Client Name Barnes Jewish Hospital  
 Inventor(s) of Mark Deuel, Thomas, F. et al.

Serial No. \_\_\_\_\_ Patent/Reg. No. 6448391

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- ☐ Letter to Commissioner
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- ☐ Maintenance Fee
- ☐ Section \_\_\_\_\_ Declaration
- ☒ Other Request for Certificate of Correction Pursuant to 37 CFR
- ☐ Check \$ \_\_\_\_\_
- ☒ Transmittal Form
- ☐ Combined Declaration/Power of Atty.
- ☐ Notice of Appeal
- ☐ Status Inquiry
- ☐ IDS, PTO 1449, \_\_\_\_\_ References
- ☐ Sheet(s) of \_\_\_\_\_ Drawings
- ☐ Letter to Official Draftsman
- ☐ Issue Fee/PTO 85b/Certificate of Mailing
- ☐ Statement of Use
- ☐ Extension of Time To Oppose
- ☐ Deposition Accl. No. 19-3140 1.322

☒ Certificate of Correction